

# Prepared by Mohammad Umer

## Python Tutorial

### 4.1 - More Decision Making Statements

**Logical Operators** : Logical operators are used to combine or modify conditions in decision-making statements:

- **and** : Returns True if both conditions are True.
- **or** : Returns True if at least one condition is True.
- **not** : Reverses the truth value of a condition.

**Q15. Write a Python program to check if a person is eligible based on their age. Follow these steps:**

- Take the age as input from the user.
- If the age is **not greater than 18**, print "Eligible".
- Otherwise, print "Not".

```
In [1]: age = int(input("Enter age: "))  
  
if not (age > 18):  
    print("Eligible")  
  
else:  
    print("Not")
```

Eligible

**Q16. Write a Python program to find the biggest of three numbers.**

```
In [2]: A = int(input("Enter value of A"))
B = int(input("Enter value of B"))
C = int(input("Enter value of C"))

if (A>B and A>C):
    print("A is biggest")

elif (B>A and B>C):
    print("B is biggest")

else:
    print("C is biggest")
```

C is biggest

**Q17. Write a Python program to check if the alphabet is a vowel ( a , e , i , o , u ) using the or operator.**

```
In [1]: alphabet = input("Enter an alphabet: ")

if alphabet == 'a' or alphabet == 'e' or alphabet == 'i' or alphabet == 'o' or alphabet == 'u':
    print("Vowel")
else:
    print("Not Vowel")
```

Vowel

**Or simple we can use**

**in operator:** The in operator in Python is used to check if a specific element exists in a collection such as a list, tuple, string, or set and returns True or False.

Code	Result
<code>print(3 in [1, 2, 3, 4])</code>	True (3 is in the list)
<code>print('a' in 'apple')</code>	True ('a' is in the string 'apple')
<code>print(5 in {1, 2, 3})</code>	False (5 is not in the set)

```
In [2]: alphabet = input("Enter alphabet")

# if alphabet in ('a', 'e', 'i', 'o', 'u'):           # Tuple
# if alphabet in ['a', 'e', 'i', 'o', 'u']:          # List
# if alphabet in {'a', 'e', 'i', 'o', 'u'}:          # Set
if alphabet in "aeiouAEIOU":                        # String
    print("Vowel")

else:
    print("Not Vowel")
```

Vowel